

REMARKS/ARGUMENTS

Applicant requests reconsideration and withdrawal of all grounds of rejection for the reasons that follow.

The Examiner has rejected claims 8, 10 and 11 under 35 U.S.C. 102 as anticipated by or, in the alternative, under 35 U.S.C. 103 as obvious over Cooper et al. In responding to arguments presented by applicant in the response of July 16, 2004, the Examiner notes that Cooper discloses "the production of the nitrate salt" in the abstract and again at column 8, lines 14-17, and concludes that reactions occurring in the process of Cooper et al. would inherently be as recited in step b) of applicant's claim 8. Further in this regard, the Examiner regards the equations in column 5 of Cooper as not necessarily those that actually take place, noting Cooper's statement that the reactions "are believed to include" the specific reactions indicated in column 5.

With regard to the disclosure in column 8 of Cooper, the relevant text states:

A second embodiment of an acid removal apparatus 36' is illustrated in FIG. 5, in which the oxidized flue gases 56' are contacted with particulate alkaline materials 84' which absorb the nitrogen acids. For example, the alkaline materials 84' may be supported on fabric in a conventional "baghouse" 86' and react with the nitrogen acids to form nitrate and nitrite salts.

Nowhere does Cooper disclose or suggest adding sufficient potassium hydroxide in particulate form to the stream to generate the potassium nitrate fertilizer. Having the flue gases flow past a fabric is not the same, or an obvious variation of, adding particulates to the flue gas stream.

PAGE

Appl. No. 09/920,800

November 16, 2004

The subject matter of dependent claims 10 and 11 is also nowhere disclosed or suggested in Cooper. For the above reasons, it is respectfully submitted that the subject matter of claims 8, 10 and 11 is neither anticipated nor rendered obvious by Cooper.

The Examiner has rejected claims 6, 7 and 9 under 35 U.S.C. 103 as unpatentable over Cooper as applied to claim 8 and further in view of Jones '298.

Jones is apparently relied upon by the Examiner for teaching the introduction of hydrogen peroxide in aerosol form.

Cooper already discloses in column 6 that the hydrogen peroxide may be injected as an atomized stream. In any event, Jones does not remedy the deficiencies of Cooper as noted above and therefore, the rejection of claims 6, 7 and 9 is also improper. In this regard, note that independent claim 6 also requires that sufficient potassium hydroxide, in particulate form, be added to the stream to generate the potassium nitrate fertilizer.

The Examiner has also rejected claims 8, 10 and 11 under 35 U.S.C. 103 as unpatentable over DE 4216772 in view of Cooper. According to the Examiner, it would have been obvious from Cooper to add potassium hydroxide in particulate form to the effluent stream of DE '772 after contact with hydrogen peroxide. Here again, the combination of references fails to disclose or suggest the addition of sufficient potassium hydroxide in particulate form to the stream to generate potassium nitrate fertilizer. Note in this regard that the DE '772 reference discloses a second stage reaction with CA(OH)2 in dust separators, preferably cloth filters (similar to Cooper). Accordingly, the rejection of claims 8, 10 and 11 as unpatentable over DE '772 in view of Cooper should also now be withdrawn.

PAGE

Appl. No. 09/920,800

*November 16, 2004

The Examiner has also rejected claims 6, 7 and 9 under 35 U.S.C. 103 as unpatentable over DE '772 in view of Cooper.

This rejection should be withdrawn for the same reasons presented above with respect to claims 8, 10 and 11.

The Examiner has rejected claims 6-11 under 35 U.S.C. 112, second paragraph as indefinite. The Examiner notes that the word "generate" should be inserted before the phrase "the potassium nitrate fertilizer" in claims 6 and 8.

Applicant has so amended claims 6 and 8, thereby overcoming this ground of rejection.

It is respectfully submitted that the application is now in condition for immediate allowance, and early passage to issue is requested. In the event, however, any small matters remain outstanding, the Examiner is encouraged to telephone the undersigned so that the prosecution of this application can be expeditiously concluded.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By:


Michael J. Keenan
Reg. No. 32,106

MJK:ljb
1100 North Glebe Road, 8th Floor
Arlington, VA 22201-4714
Telephone: (703) 816-4000
Facsimile: (703) 816-4100